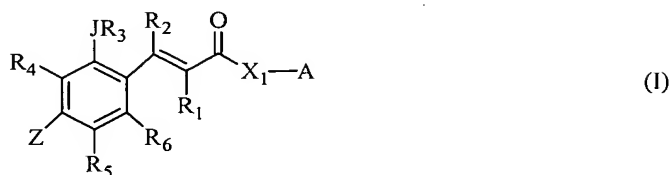


WE CLAIM:

1. A compound comprising the formula:



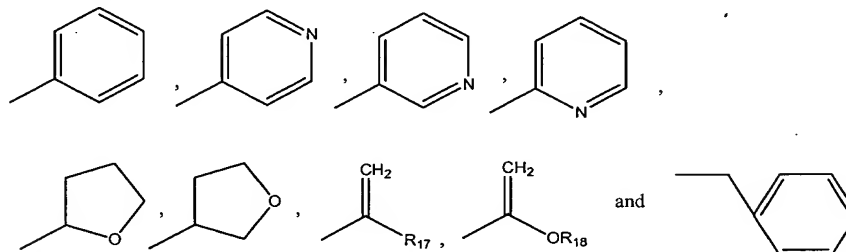
wherein:

X_1A is a residue of a releasable biologically active moiety;

R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p-D$;

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls; p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X_2 , -CN, -OR₁₉, NHR₂₀,



wherein:

R_{17} is H, CH_3 or X_3 ;

R_{18} is H, a C_1 - C_4 alkyl or benzyl;

R_{19} is H, a C_1 - C_4 alkyl, X_2 or benzyl;

R_{20} is H, a C_1 - C_{10} alkyl or $-C(O)R_{21}$,

wherein R_{21} is H, a C_1 - C_4 alkyl or alkoxy, t-butoxy or benzyloxy;

X_2 and X_3 are independently selected halogens;

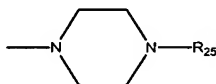
R_3 is H, CH_3 , or $-C(=O)(CR_{15}R_{16})_w-D$,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R₁ and R₂.

J is O, NH or S;

R₄, R₅, and R₆ are independently selected from the group consisting of H, CH₃, C₂-C₁₀ alkyls, C₂-C₁₀ alkenyls or C₂-C₁₀ alkynyls, each of which can be substituted or unsubstituted; straight or branched; C₂-C₁₀ heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z is H, NR₇R₈ or



wherein R₇ is selected from among H, CH₃, C₂-C₁₀ alkyls, alkenyls or alkynyls which can be substituted or unsubstituted; straight or branched; C₂-C₁₀ heteroalkyls, heteroalkenyls or heteroalkynyls, or $-(\text{CR}_{23}\text{R}_{24})_q\text{-aryl}$, or R₈,

wherein R₂₃ and R₂₄ are independently selected from the group consisting of H and C₁-C₁₀ alkyls;

q is an integer from 1 to about 6;

R₈ is selected from the group consisting of $(\text{CR}_9\text{R}_{10})_n\text{-NR}_{22}\text{-R}_{11}$, $(\text{CR}_9\text{R}_{10})_n\text{-CH}_2\text{-NHC(O)R}_{26}$ and $(\text{CR}_9\text{R}_{10})_n\text{-CH}_2\text{-E}$;

wherein R₉ and R₁₀ are independently selected from the group consisting of H, CH₃, C₂-C₁₀ alkyls, C₂-C₁₀ alkenyls or C₂-C₁₀ alkynyls, each of which can be substituted or unsubstituted; straight or branched; C₂-C₁₀ heteroalkyls, C₂-C₁₀ heteroalkenyls or C₂-C₁₀ heteroalkynyls and halogens;

R₂₆ is H, CH₃, O-t-butyl, O-benzyl;

E is OH, SH or O-C(O)R₂₇,

wherein R₂₇ is a C₁-C₆ alkyl, benzyl or phenyl;

R₂₂ is H or CH₃;

n is a positive integer from 1 to about 10;

R₁₁ is H or -L-B,

wherein L is a linker; and

B is an active moiety, reactive group moiety or a polymer; and

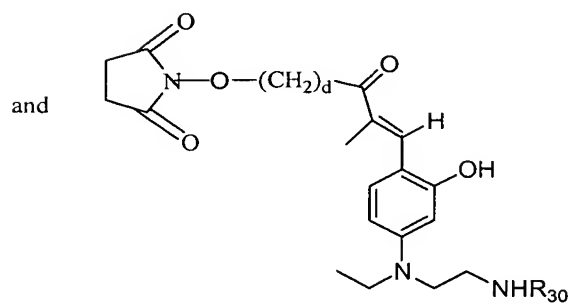
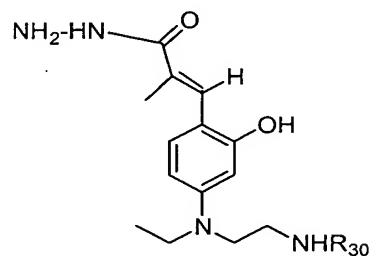
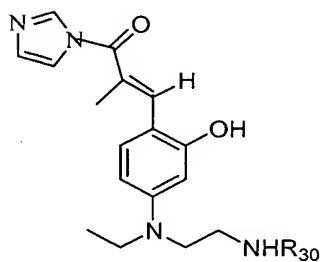
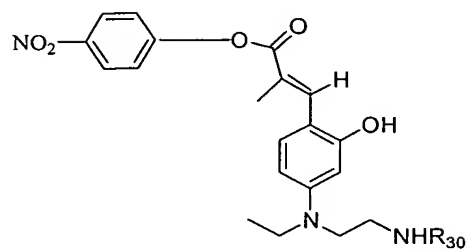
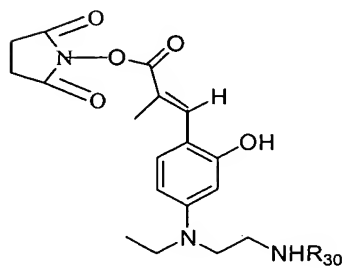
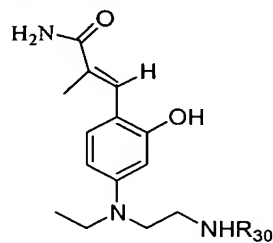
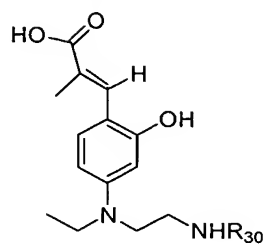
R₂₅ is H, -C(O)-R₂₈ or -C(O)-O-R₂₉,

wherein R₂₈ is a C₁-C₆ alkyl or benzyl; and R₂₉ is CH₃, t-butyl or benzyl.

2. The compound of claim 1, wherein X₁ is O, NH, or S.

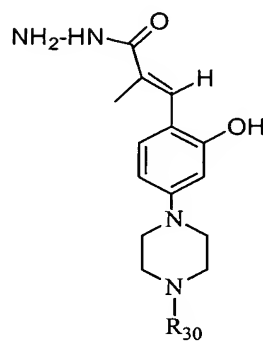
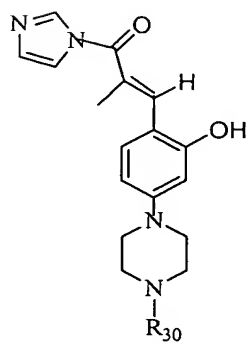
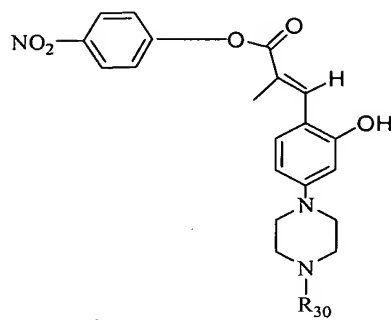
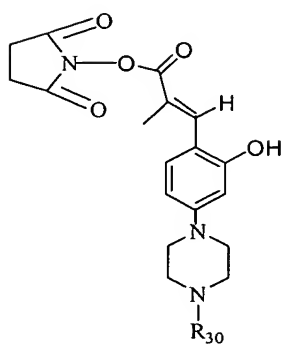
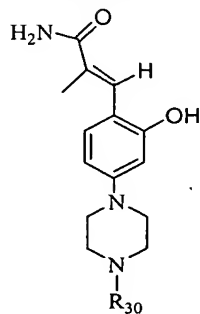
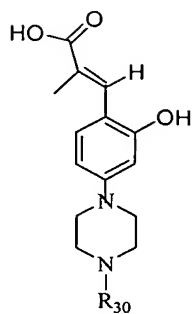
3. The compound of claim 2, wherein said residue of said biologically active moiety is selected from the group consisting of synthetic or naturally occurring organic compounds.
4. The compound of claim 3 wherein said organic compounds are selected from the group consisting of chemotherapeutics, antibiotics, antivirals, antifungals, and diagnostics.
5. The compound of claim 4, wherein said chemotherapeutics are selected from the group consisting of taxanes, taxane derivatives, paclitaxel, paclitaxel derivatives, docetaxel, docetaxel derivatives, camptothecin, camptothecin derivatives, doxorubicin, doxorubicin derivatives, amethopterin, etoposide, irinotecan and fluconazole.
6. The compound of claim 5, wherein said chemotherapeutic is paclitaxel.
7. The compound of claim 2, wherein said residue of said biologically active moiety is selected from the group consisting of proteins, polysaccharides, nucleic acids, cytokines, growth factors, antibodies, mABs, single chain antibodies (scFv), hormones and lipids.
8. The compound of claim 1, wherein Z is NR_7R_8 .
9. The compound of claim 8, wherein R_8 is $-\text{CH}_2-\text{CH}_2-\text{NH}_2$.
10. The compound of claim 8, wherein R_8 is $(\text{CR}_9\text{R}_{10})_n-\text{NR}_{22}-\text{R}_{11}$.
11. The compound of claim 1, wherein L-B comprises a maleimidyl or an N-hydroxysuccinimidyl group.
12. The compound of claim 10, wherein R_{11} comprises a polyalkylene oxide residue.
13. The compound of claim 12, wherein said polyalkylene oxide residue is a polyethylene glycol.
14. The compound of claim 13, wherein said polyethylene glycol has a number average molecular weight of from about 2,000 to about 200,000 daltons.
15. The compound of claim 10, wherein R_{11} comprises a polymer selected from the group consisting of collagen, glycosaminoglycan, poly(-aspartic acid), poly(-L-lysine) poly(-lactic acid), copolymers of poly(-lactic acid) and poly(-glycolic acid) and poly-N-vinylpyrrolidone.

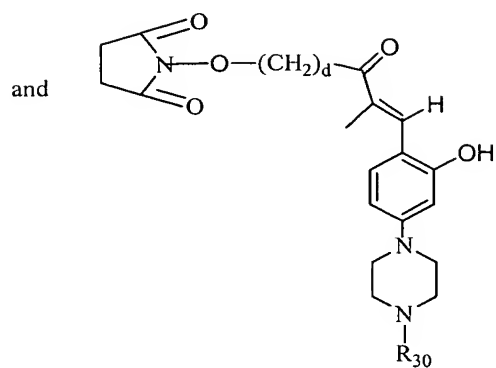
16. A compound of claim 1, selected from the group consisting of:



wherein d is a positive integer and R_{30} is H, tBoc, fMoc or a blocking group.

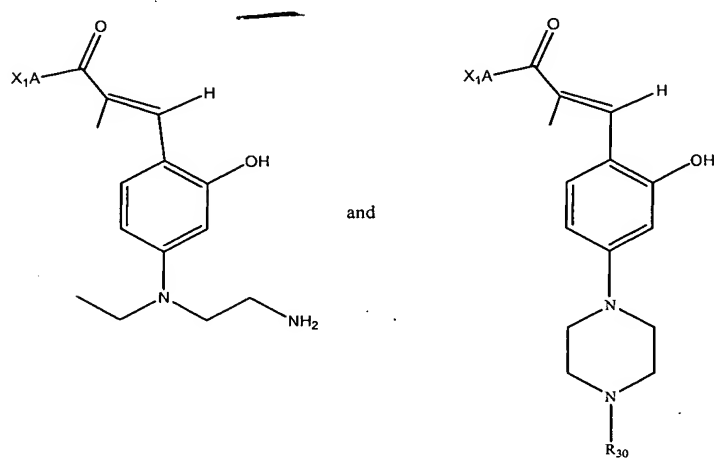
17. A compound of claim 1, selected from the group consisting of:





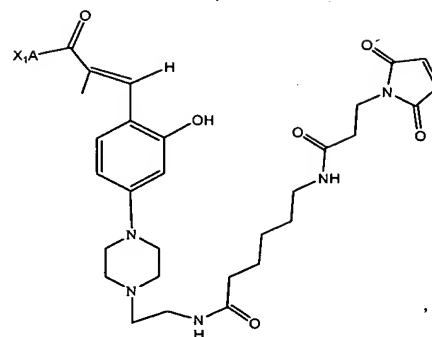
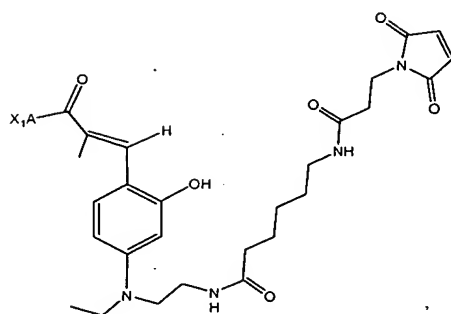
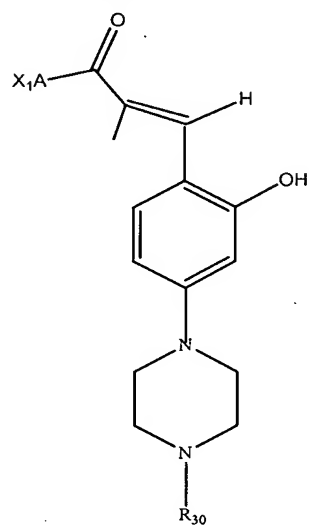
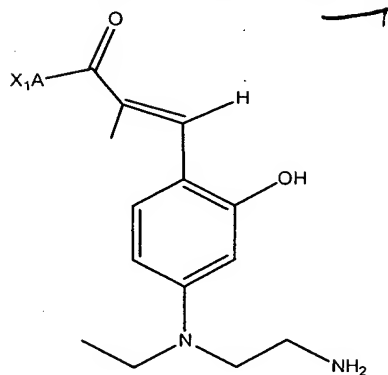
wherein d is a positive integer and R_{30} is H, tBoc, fMoc or a blocking group.

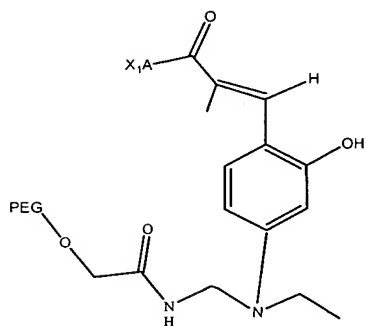
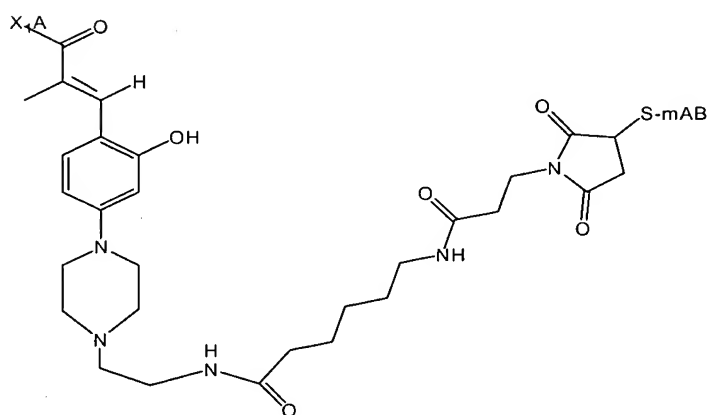
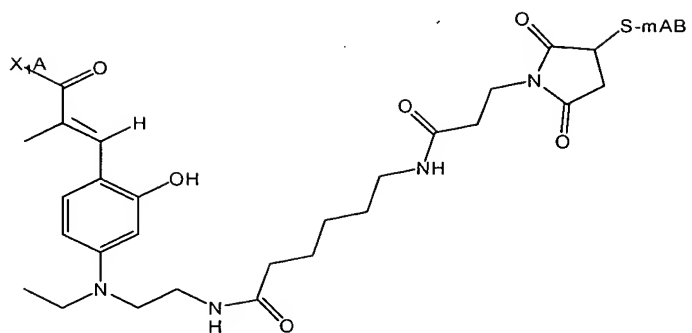
18. A compound of claim 1, selected from the group consisting of:



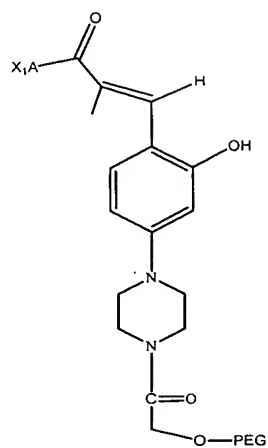
wherein X_1A is a residue of a releasable biologically active moiety;
and R_{30} is H, tBoc, fMoc or a blocking group.

19. A compound of claim 1, selected from the group consisting of:



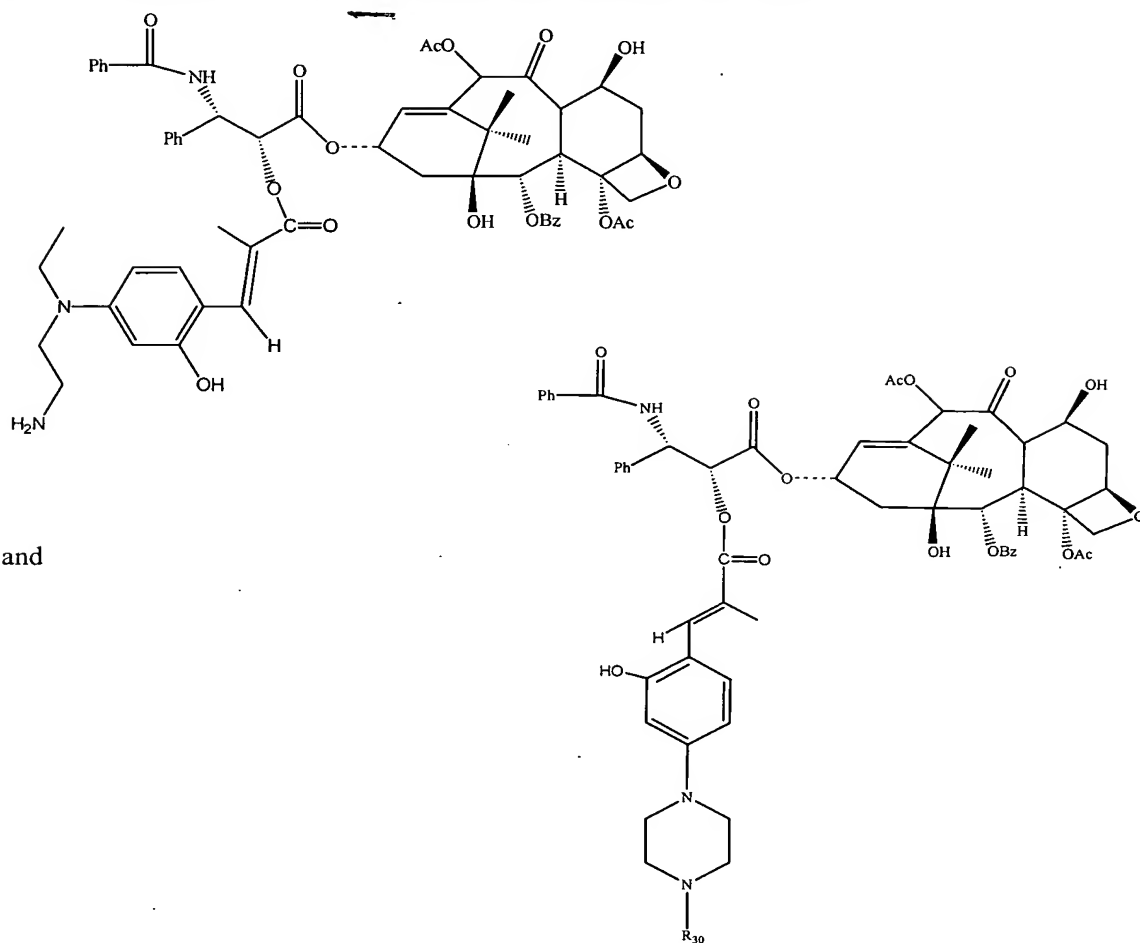


and



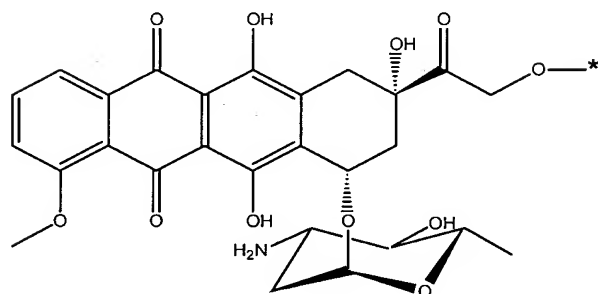
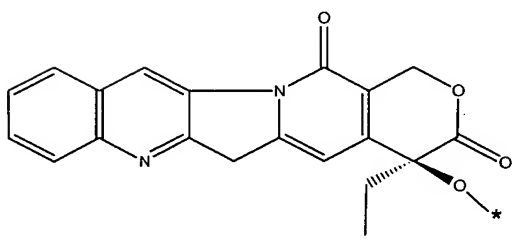
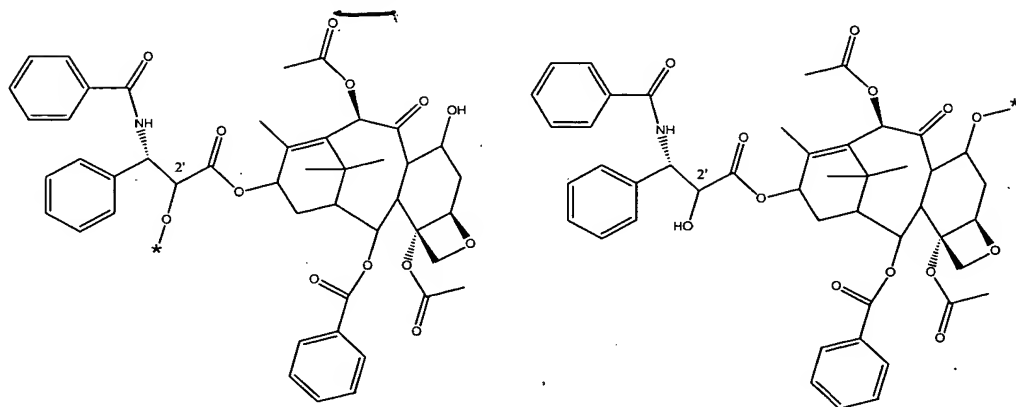
wherein X_1A is a residue of a releasable biologically active moiety;
and R_{30} is H, tBoc, FMoc or a blocking group.

20. A compound of claim 19, selected from the group consisting of:

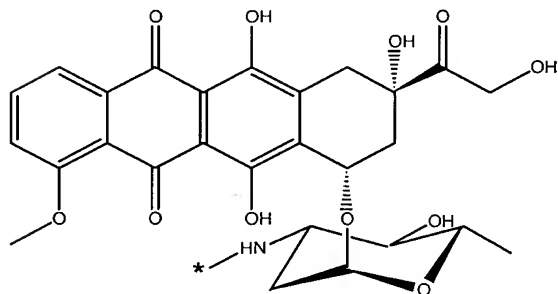


wherein R_{30} is H, tBoc, fMoc or a blocking group.

21. A compound of claim 19, wherein X_1A is selected from the group consisting of:

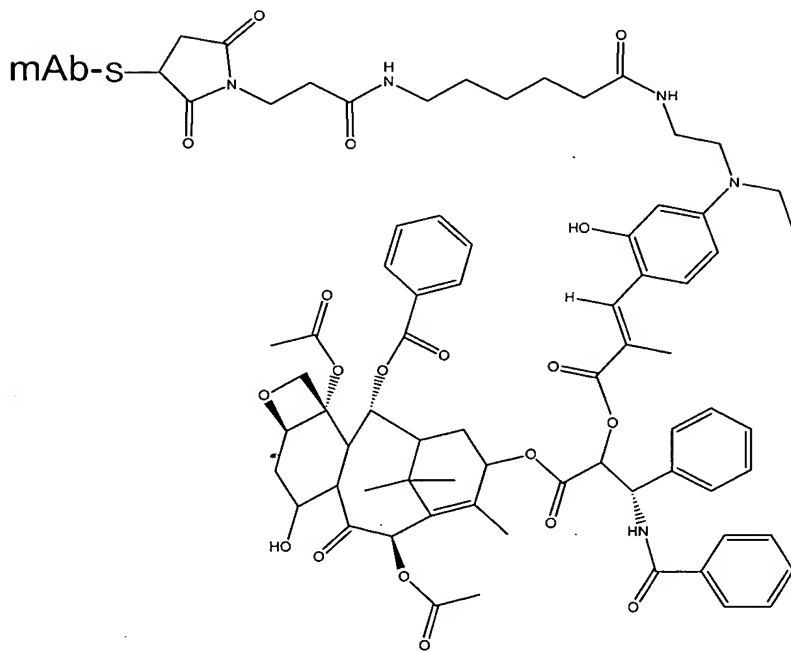
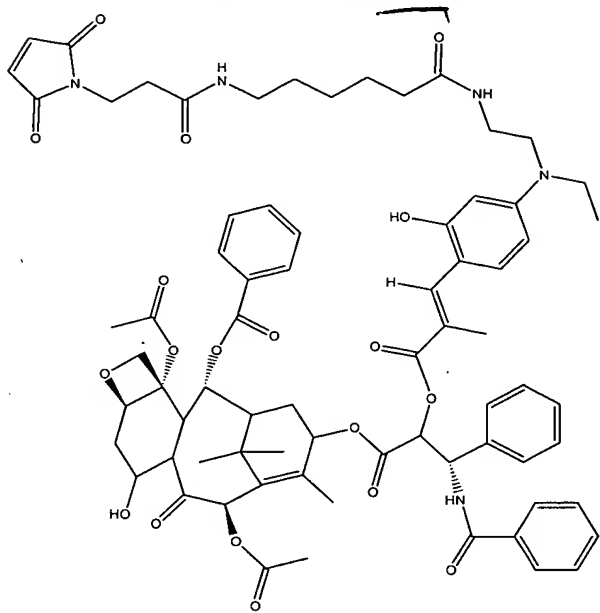


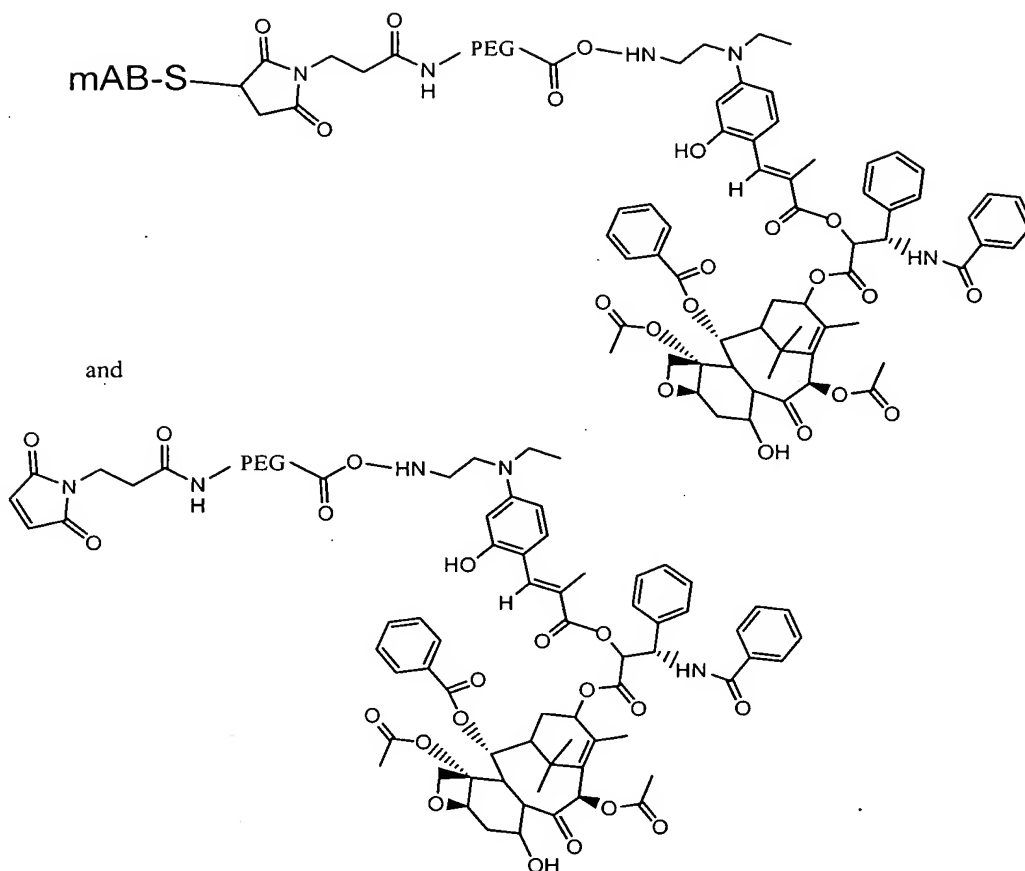
and



[illegible]

22. A compound of claim 19, selected from the group consisting of





23. The compound of claim 1, wherein J is O, R₂ is H, R₇ is CH₃CH₂; R₈ is -(CR₉R₁₀)_n-NR₂₂-R₁₁, n is 2, and R₉ and R₁₀ are both H.
24. The compound of claim 1, wherein R₁, R₂, R₃, R₄, R₅, and R₆ are independently selected from the group consisting of H, CH₃ and CH₃CH₂.
25. The compound of claim 1, wherein R₇ is CH₃CH₂; wherein R₈ is -(CR₉R₁₀)_n-NR₂₂-R₁₁, n is 2, and R₉ and R₁₀ are both H.
26. A pharmaceutically acceptable salt of the compound of claim 1.
27. A pharmaceutically acceptable salt of the compound of claim 20.
28. A pharmaceutically acceptable salt of the compound of claim ~~21~~.
29. A method of treatment, comprising:
administering to a mammal in need of such treatment an effective amount of a compound of claim 1, where X₁A is a residue of a biologically active moiety.

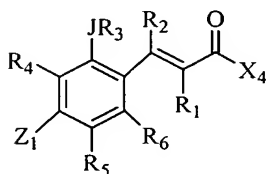
30. The method of claim 29, further comprising exposing the compound of claim 1 to an energy source after administration to said mammal.

31. The method of claim 30, wherein the energy source is white light having a wavelength in the range from 340 to 700 nm.

32. The method of claim 31, wherein the energy source is white light having a wavelength in the range from 350- 420 nm.

33. The method of claim 30, wherein the energy source is selected from the group consisting of microwave, ultrasound, radio energy, gamma radiation, radioactivity, ultraviolet light and infrared light.

34. A method of preparing a conjugate, comprising:
reacting a cinnamic acid derivative of the formula



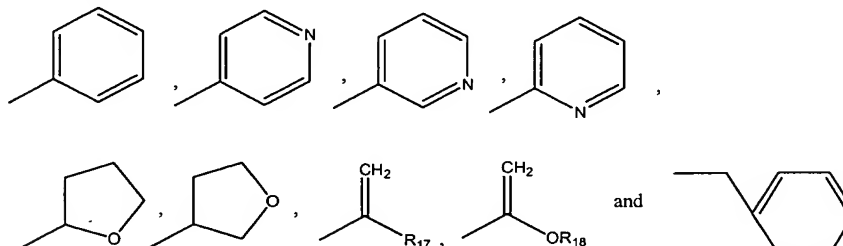
wherein

X_4 is a reactive terminal group;

R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p$ -D;

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls;
 p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X_2 , -CN, -OR₁₉, NHR₂₀,



wherein:

R_{17} is H, a CH_3 or X_3 ;

R_{18} is H, a C_1 - C_4 alkyl or benzyl;

R_{19} is H, a C_{1-4} alkyl, X_2 or benzyl;

R_{20} is H, a C_{1-10} alkyl or $-C(O)R_{21}$,

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X_2 and X_3 are independently selected halogens;

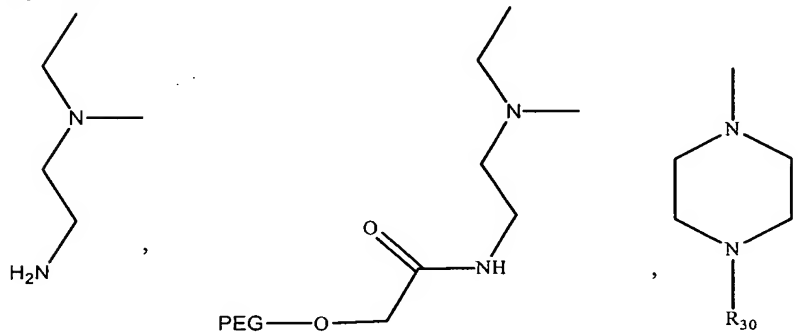
R_3 is H, CH_3 , or $-C(=O)(CR_{15}R_{16})_wD$,

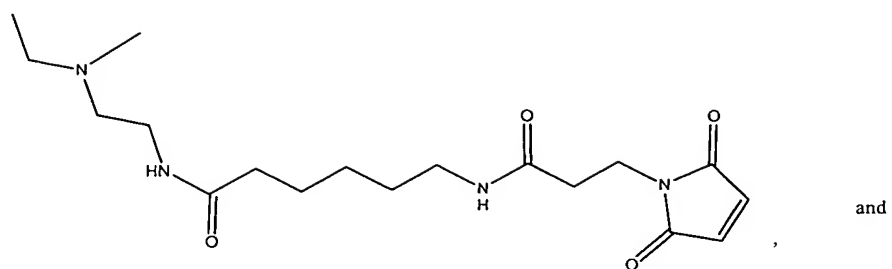
where w is 0 or an integer from 1 to about 12, and D is H or as described for R_1 and R_2

J is O, NH or S;

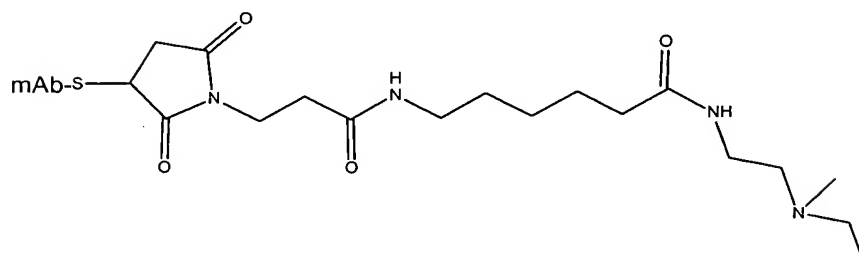
R_4 , R_5 , and R_6 are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z_1 is H or





and



wherein

R_{30} is H, tBoc, fMoc or a blocking group;

with a biologically active moiety under conditions sufficient to cause covalent attachment of said biologically active moiety to said cinnamic acid derivative.